

Amendments to the Specification:

[0001] The invention relates to a corner joint consisting of a corner connector and two metal sections and also to a method for producing such a joint ~~with the features of the preamble of the independent claims~~. The invention also relates to a connecting part of which the corner connector composed of at least two connecting parts consists.

BACKGROUND OF THE INVENTION

[0002] Numerous corner joints or corner connectors are already known and in use. For example, EP 0 810 344 B1 describes a corner joint which uses an approximately L-shaped one-piece corner connector for connecting mitered hollow sections.

[0006] Two-part corner connectors are known from FR 2 477 443, for example. The corner joint in FR 2 477 443 consists of mitered hollow sections into which a corner connector part can in each case be introduced. ~~Screwed~~ Screw connections above all are customary for connecting the corner connector parts to the hollow sections and the corner connector parts to one another.

[0011] DE 198 18 632 A1 relates to a corner joint for hollow plastic sections. Corresponding inserts made of plastic can in each case be inserted into the mitered hollow sections. The insert bodies have an adhesive channel guide system for connecting the insert bodies to the hollow sections, adhesive being introduced via an inlet opening in the region of a miter surface of an insert body.

SUMMARY OF THE INVENTION

[0012] It is therefore an object of the present invention to avoid the disadvantages of the known art, in particular to produce a device and a method of the kind mentioned in the introduction, which device is characterized by simple, economical use, great stability and a wide range of applications. The corner joint is to be especially well-suited for metal hollow sections.

[0013] According to the invention, these objects are achieved with a corner joint, a connecting part and a kit for this corner joint and also a method for producing a corner joint, both as described below. ~~with the features of the characterizing part of the independent claims.~~

[0030] This pressing can be brought about by the connecting parts in each case being introduced into the hollow sections and fastened in such a way that a distance is present between the miter surfaces of a hollow section and of the respective connecting part. When the connecting parts are then connected to one another for the connection of the hollow sections, the gap which is present owing to the distance mentioned is reduced by the connecting parts being drawn together, so that the hollow sections are pressed against one another in the region of the miter.

BRIEF DESCRIPTION OF THE DRAWINGS

[0031] Further individual features and advantages of the invention emerge from the description below of illustrative embodiments and from the drawings, in which:

Figure 1 shows a diagrammatic side view of a first illustrative embodiment of a corner joint according to the invention;

Figure 2 shows a perspective exploded illustration of a corner joint;

Figure 3 shows a longitudinal section through two connecting parts, each connected to a hollow section, before assembly;

Figure 4 shows a longitudinal section through a corner joint, the corner joint having been produced by assembling the connecting parts with the hollow section fastened thereto according to Figure 3;

Figure 5 shows a longitudinal section through a corner joint according to a further illustrative embodiment;

Figure 6 shows a section through a connecting part and a hollow section from Figure 5 (section B-B);

Figure 7 shows a top view from the outer side of a connecting part according to the illustrative embodiment from Figure 5;

Figure 8 shows a top view from the inner side of a connecting part according to the illustrative embodiment from Figure 5;

Figure 9 shows a side view of a connecting part according to a further illustrative embodiment, which is fastened in a hollow section;

Figure 10 shows a section through a connecting part according to the illustrative embodiment from Figure 9 (section DD);

Figure 11 shows a longitudinal section through the connecting part according to the illustrative embodiment from Figure 9; and

Figure 12 shows a side view of a connecting part according to a further illustrative embodiment.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0032] As can be seen from Figure 1, a corner joint consists essentially of a corner connector 2 and in each case two hollow sections 3, 9. The corner connector 2 is designed in two parts and consists of the connecting parts 5 and 10. In the present diagrammatic illustration (as in all the following figures), the angle of the miter surface 8 of the mitered hollow sections 3, 9 is to be 45° to the longitudinal axis. Other angles are also conceivable, however, one of the hollow sections being mitered at an angle of 60°, for example, and the other at an angle of 30°. However, this then presupposes hollow sections with different cross sections. The miter angle of the associated connecting parts 2, 5 concerned is adapted accordingly.